

ABSTRACT

An adjustable positioning mechanism for positioning an optical element relatively to a second element is provided. The adjustable positioning mechanism comprises a reference plate having a predetermined shaped socket providing a reference mating surface, and a mobile member for holding the optical element. The mobile member has a shaped mating portion at least part of which is defined by a spherical surface adapted for fitting into the reference plate socket and abutting against the reference mating surface, thereby providing a pivot type of joint between the reference plate and the mobile member. The adjustable positioning mechanism is also provided with a deformable maintaining element connected to the mobile member acting against the reference plate and adapted to rotatively hold the mobile member and the reference plate together in cooperation with the pivot joint. The adjustable positioning mechanism is also provided with a releasable non-deformable securing element connected to the mobile member frictionally acting against the reference plate for rigidly securing the mobile member and the reference plate together when the securing element is in a locked position. The adjustable positioning mechanism also comprises non-deformable tilt adjustment means connected to the mobile member and pressing against the reference plate for providing a controlled angular movement of the mobile member relative to the reference plate when the securing element is in an unlocked position.